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09/308,017	05/12/1999	HOLGER LAUSCH	F-6201	5604

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EXAMINER

LASTRA, DANIEL

ART UNIT	PAPER NUMBER
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3622

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/308,017

Applicant(s)

LAUSCH, HOLGER

Examiner

DANIEL LASTRA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2004.
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-58 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 44-58 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 44-58 have been examined. Application 09/308,017 (METHOD AND ARRANGEMENT FOR PROJECTION AND RECEPTION OF VISUAL AND AUDIO-VISUAL MESSAGES; AND ANALYSIS THEREOF TO DETERMINE RADIUS OF ACTION AND CUSTOMER BEHAVIOR) has a filing date 05/12/1999 and is a national stage entry of PCT/EP97/06267 International Filing Date: 11/11/1997.

Response to Amendment

2. In response to Office Action dated 04/07/04, the Applicant amended claim 52.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 44-48, 50-51 and 58 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 44-48, 50-51 and 58 are not within the technological arts.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created

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vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele

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test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, independent claims 44 and 58 recite a "useful, concrete and tangible result" (a method of analyzing customer behavior), however the claims recite no structural limitations (i.e., computer implementation), and so they fail the first prong of the test (technological arts). Dependent claims 45-48 and 50-51 do not remedy this situation as no structural limitations are recited.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 44-56 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frey (U.S. 5,138,638) in view of Sizer et al (U.S. 5,923,252).

As per claim 44, Frey teaches:

A method of analyzing customer behavior to determine a range of action of projected messages presented in a form of advertising, comprising:

providing at least a first range defined as a demarcated region limited by at least an entry and an exit (see column 4, lines 3-8);

contemporaneously counting a total number of individuals entering said first range at least through said entry and an other total number of the individuals leaving said first range at least through said exit (see column 8, lines 1-15; column 1, lines 24-25-44; column 2, lines 60-67; column 4, lines 3-8);

determining a total number of potential buyers in said first range by calculating a difference between the total number and the other total number of the individuals, said total number of potential buyers being equal to the difference (see column 2, line 60-column 3, line 9);

Frey fails to teach presenting the projected messages to the total number of the potential customers while said potential customers are in said first range. However, Sizer teaches a system that deliver messages to customers upon detecting the presence of the user (see column 6, lines 4-11; column 6, 31-45; column 7, lines 33-41). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of customers in one or more selected locations of a store (see Frey column 4, lines 3-8) and would target and display advertisements to customers upon detecting their presence, as taught by Sizer. This feature would help in determining the

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effectiveness of in-store promotions in increasing shopping units, and whether such increase in shopper units resulted in the expected increased sales (see Frey column 3, lines 50-67).

Frey teaches:

presenting for purchase at least one of a goods and a service to at least a portion of the total number of the potential customers, said advertising of said projected messages being related to at least a portion of said at least one of the goods and service (see column 3, lines 25-67);

determining a total number of actual buyers of said at least a portion of the at least one of the goods and service represented by the advertising of the projected messages by measuring actual purchases thereof by said potential buyers (see column 3, lines 25-67); and

recording and correlating the total number of potential buyers and the total number actual buyers as a basis for determining the customer behavior in relation to the advertising presented by the projected messages (see column 2, line 60 – column 3, lines 67).

As per claim 45, Frey teaches:

A method according to claim 44, further comprising:

providing an other first range at a location apart from said first range (see column 3, line 63 – column 4, line 8) ;

carrying out the method in said other first range as well as in said first range (see column 4, lines 3-22; column 3, lines 20-60); and

centrally registering and evaluating the total number of potential buyers and the total number of actual buyers determined in at least said first range and said another first range (see column 3, lines 50 – column 4, line 2).

As per claim 46, Frey fails to teach:

A method according to claim 44, wherein said step of presenting includes centrally controlling the projected messages. However, Sizer teaches a system that displays target messages to customers upon detecting the presence of the customers and where the messages are centrally controlled from a remote computer (see column 7, lines 50-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of customer in one or more selected locations of the store (see Frey column 4, lines 3-8) and would target and display advertisements to customers upon detecting their presence, as taught by Sizer. A central system would adjust the advertisements transmitted to the store's displays by evaluating the impact of the advertisements in increasing shopping units and sales.

As per claim 47, Frey fails to teach:

A method according to claim 44, wherein the projected message is one of a visual message and an audiovisual message. However, Sizer teaches a system that displays audiovisual messages to users upon detecting the presence of the users (see column 4, lines 13-17). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of customer in one or more selected locations of a

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store (see Frey column 4, lines 3-8) and would target and display audiovisual advertisements to customers upon detecting their presence, as taught by Sizer. This feature would help in determining the effectiveness of in-store promotions in increasing shopping units, and whether such increase in shopper units resulted in the expected increased sales (see Frey column 3, lines 50-67).

As per claim 48, Frey fails to teach:

A method according to claim 44, wherein the projected message is only projected to the potential customers if the total number of potential customers is at least one. However, Sizer teaches a system that displays advertisements to users upon detecting the presence of one or more users (see column 15, lines 37-50). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of customer in one or more selected locations of a store (see Frey column 4, lines 3-8) and would displays advertisements to customers upon detecting that at least one customer is present in a detection area, as taught by Sizer. There is no purpose of displaying advertisements when there is nobody to see them.

As per claim 49, Frey fails to teach:

A method according to claim 44, wherein said step of recording and correlating data is via a worldwide link. However, Sizer teaches a system where clients, advertisers and retails location are connected via a worldwide link (see figure 5). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of customer

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in one or more selected locations of a store (see Frey column 4, lines 3-8) and would display advertisements to customers upon detecting their presence, as taught by Sizer. The worldwide link connection would allow to centrally control the advertisements and the marketing campaign.

As per claim 50, Frey teaches:

A method according to claim 44, further comprising:

providing a second range defined as an other demarcated region having an other entry and an other exit, said exit of said first range and said other entry of said second range defining a connecting passage between said first and second ranges (see column 3, line 63 – column 4, line 8),

Frey fails to teach said step of presenting the projected messages being conducted in said first range and said step of presenting for purchase being conducted in said second range. However, Frey teaches in column 3, lines 42-67 that "From data generated from the system of this invention together with data from other store systems including the POS system, advertising and special event effectiveness may be evaluated. Controlled tests can be conducted in paired media markets to accurately measure the increase traffic created by individual ads, multimedia campaigns, sale events, or specific promotions. For example, it can be determined whether the advertising or special events delivered increases shopping units, and whether such increase in shopper units resulted in the expected increased sales. The system may be used to measure the impact of competitor's advertising on a store's performance, and data from the system may be used to assist in evaluating the impact of the store's

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appearance, layout, and merchandise presentation. Data from the system may be used in determining the effectiveness of in-store promotions as well as merchandise placement within the store. From this, the store management may determine whether the store is merchandising effectively or if new department or service is generating interest". Sizer teaches a system that displays messages to customers upon detecting the presence of a user in a detection area (see column 6, lines 4-11; column 6, 31-45; column 7, lines 33-41). Also Sizer teaches "the total detection area is thus divided into a grid and signals received from each sensor arrangement processed to determine placement of targets within the grid and control messages accordingly (see column 17, lines 10-15). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of customers in one or more selected locations of the store (see Frey column 4, lines 3-8) and would target and display advertisements to customers upon detecting their presence, as taught by Sizer. Frey would present the message in one range, as taught by Sizer and would present the point of sale terminals in another range. This feature would be used to determine the effectiveness of in-store promotions as well as merchandise placement within the store, as Frey would determine the correlation of advertisement placement and the corresponding increase or decrease of sales units.

Frey teaches counting, in direct sequence along with the total number of individuals entering said first range through said entry and the other total number of the individuals leaving said first range through said exit, a total number of the individuals

leaving said second range at least through said other exit (see column 3, line 53 – column 4, line 8).

As per claim 51, Frey fails to teach:

A method according to claim 44, wherein said step of presenting the projected messages is conducted in said first range and said step of presenting for purchase is conducted outside of said first range. The same rejection applied to claim 50 is applied to claim 51.

As per claim 52, Frey teaches:

An arrangement for analyzing customer behavior to determine a range of action of projected messages presented in a form of advertising, comprising:

at least a first range defined as a demarcated region limited by at least an entry and an exit (see column 1, lines 24-31; column 3, lines 1-5; column 4, lines 3-8);

a first sensor for detecting individuals entering said first range through said entry (see column 4, lines 3-8);

a second sensor for detecting the individuals leaving said first range through said exit (see column 4, lines 3-8);

Frey fails to teach a display for presenting a message to all of the individuals while in said first range. However, Sizer teaches a system that displays messages to customers upon detecting the presence of the customers in a detection area or range (see column 6, lines 4-11; column 6, 31-45; column 7, lines 33-41). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of

customers in one or more selected locations of the store (see Frey column 4, lines 3-8) and would display advertisements to the customers upon detecting their presence, as taught by Sizer. This feature would help in determining the effectiveness of in-store promotions in increasing shopping units, and whether such increase in shopper units resulted in the expected increased sales (see Frey column 3, lines 50-67).

Frey teaches:

a register for detecting purchases of a portion of the individuals who have received the message in said first range who purchased at least one of a goods and service presented in said message, said register being located outside of said first range (see column 3, 25-60). Frey does not teach that the register is located outside of the first range. However, the same rejection applied to claim 50 is applied to claim 52. and

a computer *communicatively connected to each of said first and second sensors, said display and said register, said computer* for determining a number of potential customers in said first range by subtracting a total number of the individuals exiting the first range from a total number of the individuals contemporaneously entering said first range detected respectively by said first sensor and said second sensor, said computer further for recording and evaluating the number of potential customers and the number of actual customers (see column 3, lines 25-60). Frey fails to teach and for controlling said *display automatically as a function of evaluated data received from said first and second sensors, said display and said register*. However, Sizer system would utilize the information collected by the Frey system, where the store sensors, point of sale

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terminals and store controller are all interconnected, to determine if a message and which message would be delivered to the detected person.

As per claim 53, Frey does not expressly teach:

An arrangement according to claim 52, further comprising: a second range defined as an other demarcated region limited by at least an other entry and an other exit, said second range being communicative with said first range via a passage connecting the exit of the first range with the other entry of the second range, the second sensor detecting at least the individuals passing through said passage at least from said first passage to said second passage and a third sensor for detecting the individuals leaving said second range through said other exit, the display being disposed in said first range and the at least one of the goods and service being presented in said second range, said register being disposed in the second range. However, Frey teaches "the optic modules device may be mounted overhead such as above a doorway where customers enter and leave the store. On wide doorways multiple optic modules may be used at selected space intervals to insure that all shoppers entering and leaving the store are detected. The information from the optics module is communicated to a central processing unit which interprets the data from the optic module, such as determining the height category of the person and whether the person is entering or leaving the store" (see column 3, lines 16-25). Also, Frey teaches that the "optics module may be placed in sensitive areas of the store, such as cash office, stockroom, or the like, to monitor traffic in those areas, alerting the management to unusual patterns activity" (see column 3, lines 63-67). Sizer teaches a system that

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"the total detection area is thus divided into a grid and signals received from each sensor arrangement processed to determine placement of targets within the grid and control message accordingly...When an area is sectioned, as discussed above, to avoid message being delivered in accordance with more than one area, if a target is standing across adjacent areas, for example, some overlap in the sectioning is desirable for appropriate control to ensure that only one message is delivered" (see column 17, lines 10-32). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would divide the store in grids or ranges, which would permit to determine the exact location of customers in the store and would use this information to display and target advertisements to the customers, as taught by Sizer. This feature would help in determining the effectiveness of in-store promotions, which are displayed in selected grids, as taught by Sizer, as well as merchandise placement within the store, as taught by Frey (see column 3, lines 57-60).

As per claim 54, Frey teaches:

An arrangement according to claim 53, wherein said register is an electronic cash register and said third sensor at the other exit is coupled thereto (see column 3, lines 15-32).

As per claim 55, Frey fails to teach:

An arrangement according to claim 52, wherein said computer includes an image storage for the display. However, Sizer teaches a system that targets audiovisual messages to users upon detecting the presence of the users (see column 4, lines 13-17) and where the messages are stored and hidden before displaying to the user (see

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column 1, lines 44-50). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of customers in one or more selected locations of the store (see Frey column 4, lines 3-8) and would target customers with audiovisual advertisements stored or hidden in the display's memory, as taught by Sizer. The audiovisual messages would give customers a better multimedia experience in comparison of displaying only text messages.

As per claim 56, Frey fails to teach:

An arrangement according to claim 52 in combination with at least one other same arrangement located in a different territory, said combination further comprising a central detection and evaluation unit cross-linked to said computer and an other computer of said at least one other same arrangement. However, Sizer teaches a system that targets advertisements to users upon detecting the presence of the users and where the display of the advertisements is centrally control (see column 7, lines 1-8). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of customers in one or more selected locations of the store (see Frey column 4, lines 3-8) and would target advertisements to customers upon detecting their presence, as taught by Sizer. A central location would evaluate the impact of the advertisements in increasing shopping customers and sales, and would update and adjust the advertisements accordingly.

Claim 58 contains the same limitations as claim 50 therefore the same rejection is applied.

Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sizer et al (U.S. 5,923,252) in view of Frey (U.S. 5,138,638) and further in view of Fraser (U.S. 5,620,061).

As per claim 57, Frey fails to teach:

An arrangement according to claim 52, wherein said display includes a fiber optical display. However, Fraser teaches of the delivery of advertisements using a fiber optical display (see column 4, lines 1-8). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use fiber optical displays to deliver advertisements, as taught by Fraser. The Frey invention would determine whether the advertisements or special event messages delivered have increased the shopper units, and whether such increase in shopper units resulted in the expected increased sales (see column 3, lines 42-53). The Fiber optical displays would show the advertisement and the Frey invention would analyze the effect on the customers.

Response to Arguments

5. Applicant's arguments filed 08/13/04 have been fully considered but they are not persuasive. In respect to the Section 101 rejection, the applicant needs to put computer implementation in the embodiment of the claims. The steps in claims 44-48, 50-51 and 58 can be carried out without the need of technology, therefore they are non-statutory.

The Applicant argues that Sizer discriminates in his message delivery system. The Examiner answers that claims 44 and 58 recites "presenting the projected messages to the total number of potential customers while said potential customers are in said first range" (see column 6, lines 4-45). Also Sizer teaches that "no prior art devices have the ability to be able to deliver to a person a logical sequence of messages from start to finish. Where prior art devices exists which do deliver a sequence of audio and/or video messages, the device are usually set to cycle through the sequence regardless of whether or not a person is present. Persons interacting with such devices will often approach a device while it is part way through its message cycle. The information will therefore mean very little to them or will be confusing" (see column 1, line 65 – column 2, line 9). Also Sizer teaches "the present applicant believe that impact can be increased by first of all establishing that a person or persons is likely to be interested in a particular product or service and then delivering a message to that person in audio and/or visual form" (see column 1, lines 40-45). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Sizer would display messages to all persons upon detecting their presence in a detection range. Sizer system increased the effectiveness of the displaying of advertisements by adding the feature of targeting the messages by user's characteristic and behavior.

The Applicant argues that the Examiner did not provide support for mentioning that Sizer would display messages to all persons upon detecting their presence in a detection range. The Examiner answers that Sizer column 6, lines 4-45 teaches a

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system that, based upon a detected customer behavior, identification or characteristic, would adjust the message displayed to that detected customer. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that if the Sizer system can discriminate on the delivery of messages to detected customers, it would also set up the system to display messages to all detected customers. The Sizer system is an improvement to the old method of delivering messages to all detected persons by targeting messages to persons based upon the persons' identifications or detected behaviors. The Sizer invention would save time and money, as messages targeted to customers would have a bigger probability to be viewed, compared to the old method of displaying messages to all persons detected in a store without any kind of customers' discrimination.

The Applicant argues that Sizer is a product-bound system and that product bound system is not required by independent claims 44 and 52. Refer to arguments above for Examiner answer. Also, the Applicant is arguing about features that are not in the claims when he argues that his invention is not product-bound.

The Applicant argues that neither Frey nor Sizer teaches presenting an advertising message to all persons within a range directed to a particular product or service and then subsequently compare the number of these individuals to another number representing a portion of these individuals who actually purchase the product or service to which the presented advertising message was directed.

The Examiner answers that Frey teaches "From data generated from the system of this invention together with data from other store systems including the POS system,

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advertising and special event effectiveness may be evaluated. Controlled tests can be conducted in paired media markets to accurately measure the increase traffic created by individual ads, multimedia campaigns, sales events, or specific promotions. For example, it can be determined whether the advertising special or special events delivered increased shopper units, and whether such increase in shopper units resulted in the expected increase sales...data from the system may be used to assist in evaluating the impact of the store's appearance, layout and merchandise presentation. Data from the system may be used in determining the effectiveness of in-store promotions, as well as merchandise placement within the store (see column 3, line 43-60). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of customers in one or more selected locations of a store (see Frey column 4, lines 3-8) and would target advertisements to customers upon detecting their presence, as taught by Sizer. Frey would compile the data of potential customers, total customers and actual purchases and would use this data to determine whether the advertisements delivered using the Sizer system increased shopper units, and whether such increase in shopper units resulted in the expected increase in sales.

The Applicant argues that Frey does not teach an exit of one range and entry of another range. The Examiner answers that Sizer teaches "the total detection area is thus divided into a grid and signals received from each sensor arrangement processed to determine placement of targets within the grid and control messages accordingly (see column 17, lines 10-15). Therefore, it would have been obvious to a person of ordinary

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skill in the art at the time the application was made, to know that Frey would use the Sizer system to detect the presence of customers in one or more selected locations of the store (see Frey column 4, lines 3-8) and would target and display advertisements to customers upon detecting their presence, as taught by Sizer. Frey would present the message in one range, as taught by Sizer and would present the point of sale terminals in another range. This feature would be used to determine the effectiveness of in-store promotions as well as merchandise placement within the store, as Frey would determine the correlation of advertisement placement and the corresponding increase or decrease of sales units.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

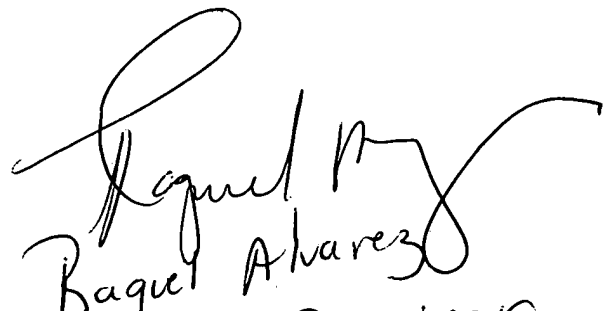
Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LASTRA whose telephone number is 703-306-5933. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ERIC W STAMBER can be reached on 703-305-8469. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Lastra
November 10, 2004



Raquel Alvarez
Primary Examiner
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